SonicWALL Security Appliances

SonicWALL PRO 2040
Getting Started Guide

SONICWALL

SonicWALL PRO 2040 Security Appliance
Getting Started Guide

The SonicWALL PRO 2040 is a total security platform for complex networks, utilizing a deep packet inspection engine and six* fully configurable Ethernet interfaces to provide cost-effective, enterprise-class firewall throughput and VPN concentration. As a comprehensive network security, mobility and productivity solution targeting networks comprising 200 or fewer nodes or 50 or fewer network locations, the SonicWALL PRO 2040 offers the configuration flexibility and redundancy features typically associated with more expensive appliances.

* Six interfaces are available by upgrading from the SonicOS Standard version of software to SonicOS Enhanced. Also note that ICSA certification for the SonicWALL PRO 2040 only applies when running the SonicOS Enhanced version of software on the device. See both the SonicOS Enhanced Release Notes and the standalone documentation for details on upgrading from SonicOS Standard to SonicOS Enhanced.

This *Getting Started Guide* provides instructions for basic installation and configuration of the SonicWALL PRO 2040 running SonicOS Standard. After you complete this guide, computers on your Local Area Network (LAN) will have secure Internet access.

✎ **Note:** *For complete documentation, refer to the SonicOS Standard Administrator's Guide on the SonicWALL Resource CD or at:*
http://www.sonicwall.com/support/documentation.html.

Before You Begin

Check Package Contents

- One SonicWALL PRO 2040 security appliance
- One SonicWALL PRO 2040 Getting Started Guide
- One SonicOS Standard Release Notes
- One straight-through Ethernet cable
- One crossover ethernet cable (red)
- One DB-9 (RS-232) CLI cable (requires a DB-9 serial port). This is a DB-9 Female-to-DB-9 Female Null Modem Cable.
- One rack-mount kit
- One power cord*
- One SonicWALL PRO 2040 Resource CD, which contains:
  - SonicWALL PRO 2040 Product Documentation
  - Software Utilities

A power cord is included only with units shipped to North America.

Any Items Missing?

If any items are missing from your package, contact:
SonicWALL Support
Web: <http://www.sonicwall.com/support/>
E-mail: customer_service@sonicwall.com

What You Need to Begin

- A computer to use as a management station for initial configuration of the SonicWALL PRO 2040
- A Web browser supporting Java and HTTP uploads. Internet Explorer 5.0 or higher, Netscape Navigator 4.7 or higher, Mozilla 1.7 or higher, or Firefox are recommended
- An Internet connection

SonicWALL PRO 2040 Configuration Steps

1 Collecting Required Information

Internet Service Provider (ISP) Information

Collect the following information about your Internet service:

If you connect via	You probably use	Please record
Cable modem, DSL with a router	DHCP	You do not need to provide any Internet connection information.
Home DSL	PPPoE	User Name: _____ Password: _____ **Note**: Your ISP may require your user name in the format: *name@ISP.com*
T1, Static broadband	Static IP	IP Address: _____ Subnet Mask: _____ Default Gateway: _____ Primary DNS: _____ Secondary DNS (optional): _____

If you connect via	You probably use	Please record
Dial in to a server	PPTP	Server Address: _____ User Name: _____ Password: _____

📝 **Note:** *If you are not using one of the network configurations above, refer to the SonicOS Standard Administrator's Guide.*

Other Information

SonicWALL Management Interface

To access the SonicWALL PRO 2040 Web-based management interface. These are the default settings, which you can change:

User Name: ___*admin*_____

Password: _____ (default: *password*)

2 Applying Power to the SonicWALL PRO 2040

1. Plug the power cord into the SonicWALL PRO 2040 and into an appropriate power outlet.
2. Turn on the power switch on the rear of the appliance next to the power cord.

The Power LED on the front panel lights up green when you plug in the SonicWALL PRO 2040. The Test and Alarm LEDs light up and may blink while the appliance performs a series of diagnostic tests. When the Test light is no longer lit, the SonicWALL PRO 2040 is ready for configuration.
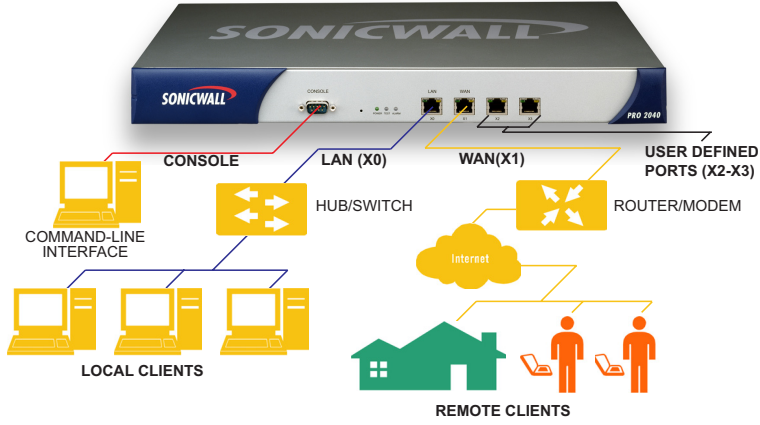

If the Test or Alarm LEDs remain lit after the SonicWALL PRO 2040 has booted, restart the SonicWALL PRO 2040.

For more troubleshooting information, refer to the SonicOS Standard Administrator's Guide.

③ Connecting the SonicWALL PRO 2040

1. Connect one end of an Ethernet cable to your Internet connection such as a DSL modem or a router.
2. Connect the other end of the cable to the **WAN** port on the front of your SonicWALL PRO 2040.

   The **WAN** Activity LED to the above left of the port lights up in green indicating an active connection.

3. Connect one end of an Ethernet cable to the computer you are using to manage the SonicWALL PRO 2040.
4. Connect the other end of the cable to the LAN port on the front of your SonicWALL PRO 2040.

   The LED for the LAN port you used lights up indicating an active connection. This may take several seconds.

   When you connect the LAN, the SonicWALL PRO 2040 automatically checks for a DHCP server on the LAN. If it does not find one, it automatically enables its own DHCP server.

④ Accessing the Management Interface

The computer you use to manage the SonicWALL PRO 2040 must be set up to accept a dynamic IP address, or have an unused IP address in the 192.168.168.x/24 subnet, such as 192.168.168.20. For instructions on configuring your IP address, see "Configuring Computers for Your LAN" on page 20.

To access the Web-based management interface of the SonicWALL PRO 2040:

1. On the computer you just connected, start your Web browser.

⚠️ **Alert:** *Your Web browser must support Java and HTTP uploads. Internet Explorer 5.0 or higher or Netscape Navigator 4.7 or higher are recommended.*

2. Enter **192.168.168.168** (the default LAN management IP address) in the **Location** or **Address** field.

192.168.168.168 in the Location or Address field
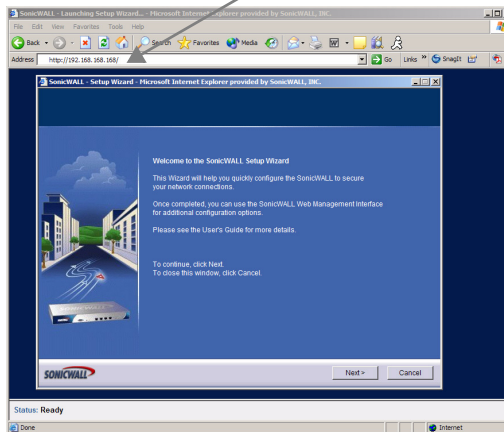
3. The **SonicWALL Setup Wizard** launches and guides you through the configuration and setup of your SonicWALL PRO 2040.

If the SonicWALL Setup Wizard Does Not Appear

If you cannot connect to the SonicWALL PRO 2040 or the **Setup Wizard** does not display, verify the following configurations:

• Did you correctly enter the SonicWALL PRO 2040 management IP address in your Web browser?

• Are the Local Area Connection settings on your computer set to obtain an IP address dynamically (DHCP) or set to a static IP address of 192.168.168.20? See "Configuring Computers for Your LAN" on page 20 for instructions on changing your Local Area Connection settings.

- Do you have the Ethernet cable connected to your computer and to the LAN port on your SonicWALL PRO 2040?
- Some browsers may not launch the **Setup Wizard** automatically. In this case, log into SonicWALL PRO 2040 using "**admin**" as the user name and "**password**" as the password. After you log in, click the **Wizards** button on the **System > Status** page. Select **Setup** to begin configuring your SonicWALL PRO 2040.
- Some popup blockers may prevent the launch of the setup wizard. You can temporarily disable your popup blocker, or add the management IP address of your SonicWALL (for example, 192.168.168.168) to your popup blocker's allow list.

5 Using the SonicWALL Setup Wizard

The SonicWALL **Setup Wizard** provides user-guided instructions for configuring your SonicWALL PRO 2040.

Note: *Use the ISP information you collected in Step 1, "Collecting Required Information" on page 2 to complete the steps in the **Setup Wizard**.*

Tip: *If you do not know what type of Internet connection you have, contact your ISP. In addition, the SonicWALL **Setup Wizard** will attempt to detect your connection settings. You will see what is automatically selected in Step 3, **WAN Network Mode***

Configuring the SonicWALL PRO 2040

The SonicWALL configuration wizard displays. The first screen is **Welcome.** Click **Next** to begin the wizard configuration.

1. **Change Password** - Change the administrative password. This is the password for the **admin** account.

Old Password	Should be populated with the default password, *password.*
New Password	Enter your new password.
Confirm	Re-enter your new password.

Note: *Keep your new password in a safe place. If you lose your password, you will have to reset the SonicWALL PRO 2040 to factory settings, losing your configuration. For instructions on resetting your SonicWALL PRO 2040, See the SonicOS Standard Administrator's Guide available on the SonicWALL Resource CD and on the Web at: http://www.sonicwall.com/support/documentation.html*

Click **Next**.

2. **Change Time Zone** - Change the **Time Zone** setting to your local time zone.

Time Zone	Select the time zone for your location from the list.
Automatically adjust clock for daylight saving time	Check this setting if you live in an area that observes Daylight Savings Time.

Click **Next**.

📝 **Note:** *It is important that you set the time zone correctly before you register your SonicWALL PRO 2040.*

3. **WAN Network Mode** - The **Setup Wizard** automatically detects most networking modes. If it does not detect the networking mode, you may have a Static IP Address. See Step 1, "Collecting Required Information" on page 2.

Confirm the selection or select the correct type of network connection for your network.

Static IP	Select **Static IP** if you want to manually assign the SonicWALL PRO 2040 a specific, unchanging IP address.
DHCP	Select **DHCP** if your ISP automatically assigns your computer a dynamic IP Address. DHCP is commonly used with cable modems.
PPPoE	Select **PPPoE** if your ISP requires a username and password to establish a connection and assign a dynamic address. PPPoE is commonly used with DSL modems.
PPTP	Select **PPTP** if you dial into a specific server and log into a VPN to establish a connection. With PPTP, you can have either a static or dynamic IP Address.

Click on the yellow link for a networking type to see a definition.

Click **Next**.

4. **WAN Network Mode** - The second WAN network mode page configures your WAN settings for the selection you made in the previous page.

Statis IP

The **Setup Wizard** screen should display:

WAN Network Mode: NAT Enabled (Static IP)

SonicWALL WAN IP Address	Enter a single, static IP address. This must be in the correct address range for your ISP.
WAN Subnet Mask	Enter the subnet mask for your network, for example, 255.255.255.0.

Gateway (Router) Address	Enter the IP address of your internet gateway provided by your ISP.
DNS Server Address	Enter the IP address of the DNS server for your network.
DNS Server Address #2 (optional)	You can enter a secondary, back-up DNS server to use if the first one fails.

Click **Next**.

DHCP

The **Setup Wizard** page should display:

WAN Network Mode: NAT with DHCP Client

> You do not need to enter any WAN networking settings. The network settings are provisioned automatically from a DHCP server.
>
> Click **Next**.

PPPoE

The **Setup Wizard** page should display:

WAN Network Mode - NAT with PPPoE Client

Obtain an IP Address Automatically	Select this if your ISP assigns you a dynamic IP address.
Use the following IP Address	Select this if your ISP has assigned you a static IP address, and enter the address.
PPPoE User Name	Enter the user name for your Internet account. Your ISP may require you to enter your user name in email address format, including "@" and the domain name, for example, *joe.user@ispgateway.net.*
PPPoE Password	Enter the password for your internet account.
Inactivity Disconnect (minutes)	Check this box if you want the SonicWALL PRO 2040 to disconnect from the Internet if there is no traffic for the number of minutes you enter.

> Click **Next**.

PPTP

The **Setup Wizard** screen should display:

WAN Network Mode: NAT with PPTP Client

PPTP Server IP Address	Enter the address of the PPTP server you are connecting to.
PPTP User Name	Enter your network user name.
PPTP Password	Enter your network password.
Obtain an IP Address Automatically	Select this if the server assigns you a dynamic IP address.
Use the following IP Address	Check this if you have been given a static IP address, and fill in the following three fields.
SonicWALL WAN IP Address	Enter the static IP address for your connection.

WAN Subnet Mask	Enter the subnet mask for your connection.
Gateway (Router) Address	Enter the address of your Internet Gateway.

Click **Next**.

5. **LAN Settings** - The LAN Settings page configures your LAN interface.

SonicWALL LAN IP Address	Accept the default IP address or enter a new IP address of the LAN interface. Record the address: _____
LAN Subnet Mask	Accept the default, or enter a subnet mask for your LAN.
Enable Windows Networking Support	Leave this option checked if you plan to have more than one Windows computer on your network. Windows networking allows them to communicate with each other. Windows networking has no effect on computers with other operating systems.

By default, your SonicWALL PRO 2040 is configured with a LAN network IP address, **192.168.168.168**, and subnet mask, **255.255.255.0**, that will work well for most installations. In most cases, leave the default LAN IP address and subnet mask unchanged.

✎ **Note:** *The LAN IP address is the address you will use to access the SonicWALL PRO 2040 management interface.*

Click **Next**.

6. **LAN DHCP Settings** - The LAN DHCP Settings page allows you to select whether or not to use the DHCP Server in the SonicWALL PRO 2040 to automatically distribute IP addressing information to computers and other network devices on your LAN.

Enable DHCP Server on LAN	Leave checkbox checked to use the DHCP server in the SonicWALL PRO 2040 security appliance. Do not select this option if you already have a DHCP server on your network, or if you want to require your network clients to have static IP addresses.
LAN Address Range	If you enabled the DHCP Server, enter a range of IP addresses in the same subnet as the LAN IP address. Leave the default range unchanged if you accepted the default LAN IP address and subnet mask settings in the previous page. The default DHCP range works for most installations.

Click **Next**.

7. **SonicWALL Configuration Summary** - Displays your network configuration information.
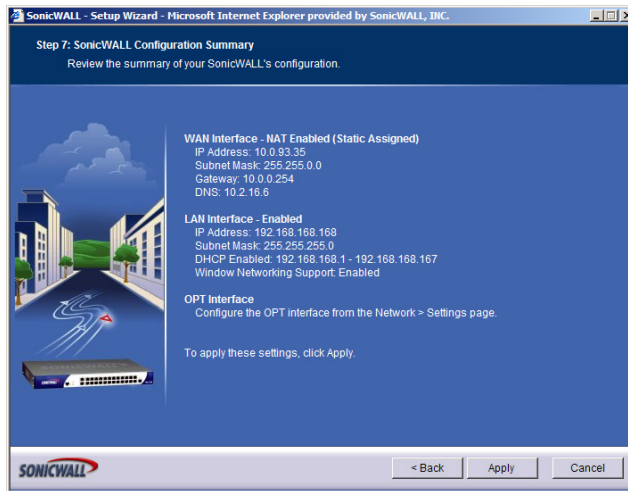
The above figure displays a sample Configuration Summary page using NAT Enabled with a Static IP address. This page is divided up into three sections that display settings for each interface on the device. Confirm that the settings displayed match the information you created in the section Step 1: "Collecting Required Information" on page 2.

If you need to make changes, click the **Back** button. If the configuration settings are correct, click **Apply** to apply your settings to the SonicWALL security appliance. If you click Cancel, no settings will be applied to the SonicWALL security appliance.

The Storing SonicWALL Configuration page with a yellow status indicator displays, showing that the SonicWALL PRO 2040 is storing the new configuration. When it is finished the **Setup Wizard Complete** page displays.

8. **Setup Wizard Complete** - Your SonicWALL PRO 2040 is now successfully configured for LAN and Internet access. Click **Restart** to reboot your SonicWALL PRO 2040 and complete the configuration process.

6 Testing Your Connection

Test your connection: After the SonicWALL PRO 2040 reboots, open another Web browser, and go to http://www.sonicwall.com.

If you can view the SonicWALL home page, you have configured everything correctly.

If you cannot view the SonicWALL home page, restart your computer to make sure it synchronizes with the new network settings of th SonicWALL PRO 2040.

If you still cannot connect, use the **Setup Wizard** to configure the SonicWALL PRO 2040 again: Return to step 4, "Accessing the Management Interface" on page 5, log in as "admin" with your administrative password, and click on the Wizards button in the top right corner of the management interface to restart the wizard.

For more troubleshooting information, refer to the SonicOS Standard Administrator's Guide.
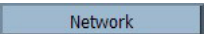
Restart your Management Station

Your management station may need to restart to accept new network settings from the DHCP server in the SonicWALL security appliance.
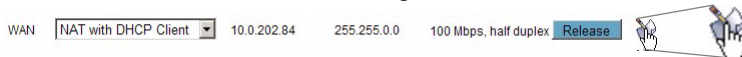
Restart your DSL Modem

Your DSL Modem may need to restart to communicate with the DHCP Client in the SonicWALL security appliance.

Enter a Host Name in your WAN DHCP Settings

If you selected DHCP for your WAN settings, you may need to specify a host name for your connection:

a. Check with your ISP to see if a host name is required.

b. Go to *Procedure 4, "Accessing the Management Interface" on page 5*, and use the LAN IP address you set in *Procedure 5, Step 6: "LAN Settings" on page 9*.

c. Log in as "*admin*" with your administrative password.

d. In the menu on the left, click [Network].

e. In the Interfaces table, click the configure icon 🖉 in the **WAN** line.

WAN   [NAT with DHCP Client ▼]   10.0.202.84   255.255.0.0   100 Mbps, half duplex [Release]

f. In the **WAN Properties** window, enter the host name and click **OK**.

Run the Setup Wizard

Use the **Setup Wizard** again to reconfigure your network settings:

a. Go to *Procedure 4, "Accessing the Management Interface" on page 5*, and use the LAN IP address you set in *Procedure 5, Step 6: "LAN Settings" on page 9*.

b. Log in as "*admin*" with your administrative password.

c. Click the **Wizards** button in the top-right corner of the management interface to restart the wizard.

d. Select **Setup** and click **Next** to start the **Setup Wizard**.

Registering Your SonicWALL PRO 2040

Once you've established your Internet connection, it is recommended you register your SonicWALL security appliance at mySonicWALL.com. Registering your SonicWALL security appliance provides the following benefits:

- Try a FREE 30-day trial of SonicWALL Gateway Anti-Virus, Anti-Spyware and Intrusion Prevention Service. Plus trials of SonicWALL Content Filtering Service and Network Anti-Virus.
- Activate SonicWALL security services
- Access SonicOS firmware updates
- Get SonicWALL technical support

Before You Register

Make sure the DNS and Time settings on your SonicWALL PRO 2040 are correct when you register the device. Configure Time settings in the **System > Time** page. Configure DNS settings in the **Edit Interface** window from the **Network > Interfaces** page.

You need a mySonicWALL.com account to register the SonicWALL PRO 2040. You can create a new mySonicWALL.com account directly from the SonicWALL management interface.

If you already have a mysonicWALL.com account, go to "Registering Your SonicWALL PRO 2040" on page 15 to register your appliance.

🖉 **Note:** *mySonicWALL.com registration information is not sold or shared with any other company.*

Creating a mySonicWALL.com Account

Creating a mySonicWALL.com account is fast, simple, and FREE. Simply complete an online registration form in the SonicWALL PRO 2040 management interface.

1. If you are not logged into the SonicWALL PRO 2040 management interface log in with the username *admin* and the administrative password you set in the Setup Wizard.
2. If the **System > Status** page is not displaying in the management interface, click **System** in the left-navigation menu, and then click **Status**.
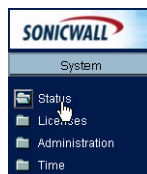
3. On the **System > Status** page, in the **Security Services** section, click the **Register** link in **Your SonicWALL is not registered. Click here to Register your SonicWALL**.

Note: *If you have already registered your SonicWALL security appliance, the Register your SonicWALL button does not display in the Security Services section of the System > Status page.*

4. In the **mySonicWALL.com Login** page, click the **here** link in "**If you do not have a mySonicWALL account, please click here to create one**." The mySonicWALL.com account form is displayed.

5. In the **MySonicWall Account** page, enter in your information in the **Account Information**, **Personal Information** and **Preferences** fields. All fields marked with an asterisk (⋆) are required fields. You have access to the following two services:

Note: *Remember your username and password to access your mySonicWALL.com account.*

6. Click **Submit** after completing the **MySonicWALL Account** form.
7. When the mySonicWALL.com server has finished processing your account, you will see a page saying that your account has been created. Click **Continue**.

Congratulations. Your mySonicWALL.com account is activated.

Now you need to log into mySonicWALL.com to register your SonicWALL PRO 2040.

6 Registering Your SonicWALL PRO 2040

1. If you are not logged into the SonicWALL PRO 2040 management interface, log in with the username *admin* and the administrative password you set in the Setup Wizard.

2. If the **System > Status** page is not displaying in the management interface, click **System** in the left-navigation menu, and then click **Status**.
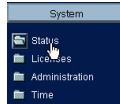
3. On the **System > Status** page, in the **Security Services** section, click the **Register** link. The **mySonicWALL.com Login** page is displayed.

4. Enter your mySonicWALL.com account username and password in the **User Name** and **Password** fields, then click **Submit.**

5. The next several pages inform you about the free trials available to you for SonicWALL's Security Services:

   • **Gateway Anti-Virus** - protects all hosts behind your SonicWALL from viruses using deep packet inspection to detect and prevent viruses before they can reach hosts on your network.

   • **Anti-Spyware** - prevents malicious spyware from infecting networks and disrupts background communications from existing spyware programs

   • **Intrusion Prevention Service** - protects your network with signatures for more than 1800 Trojan, worm and application layer attacks

   • **Network Anti-Virus** - protects hosts on your network from viruses by enforcing the use of client-based Anti-Virus software.

   • **Premium Content Filtering Service** - protects your network and enhances productivity by limiting access to offensive web sites

   Click **Continue** on each page.

6. At the top of the **Product Survey** page, Enter a "friendly name" for your SonicWALL content security appliance in the **Friendly Name** field. The friendly name allows you to easily identify your SonicWALL content security appliance in your mySonicWALL.com account.

7. Please complete the Product Survey. SonicWALL uses this information to further tailor services to fit your needs.

8. Click **Submit**.

9. When the mySonicWALL.com server has finished processing your registration, you will see a page informing you that your SonicWALL PRO 2040 appliance is registered. Click **Continue**, and the **System > Licenses** page is displayed showing you all your activated services.

Congratulations

Your SonicWALL PRO 2040 is now fully operational.

You can continue with this Getting Started Guide to:
- Activate free trials of SonicWALL Security Services
- Set up computers on your network
- Mount your SonicWALL PRO 2040 on a wall or to any vertical surface

Activate Your Free Trials of the SonicWALL Security Services

When you register your SonicWALL PRO 2040, you are eligible for a Free Trial of the SonicWALL Security Services:

- **Gateway Anti-Virus, Anti-Spyware and Intrusion Prevention Service** - Delivers real-time protection against viruses, worms, trojans, spyware, and application-layer attacks for your entire network
- **Network Anti-Virus** - Delivers desktop and server anti-virus protection
- **Premium Content Filtering Service** - Enhances productivity by limiting access to objectionable Web content

At the end of your free trial period, the services will automatically expire unless you purchase a subscription from your reseller or at <https://www.mySonicWALL.com>.

Activate your Free Trials

If your SonicWALL management interface is displaying the **Manage Services Online** table on the **System > Licenses** page, skip to Step 5.

1. Log in to your SonicWALL management interface.

2. In the left-navigation menu, click **System** and then **Licenses**.

3. Near the bottom of the **System > Licenses** page, under **Manage Security Services Online**, click the link: **For Free Trials, Click Here**.

4. Log in with your mySonicWALL.com account name and password, if prompted.

5. In the **Manage Services Online** table, click **Try** in the **Free Trial** column for **Gateway Anti-Virus**.

6. In the SonicWALL Gateway Anti-Virus page, click **Continue**. Your Gateway Anti-Virus/Intrusion Prevention Service free trial is now activated.

7. Repeat **steps 5-6** for **Anti-Spyware**, **Intrusion Prevention Services**, **Network Anti-Virus** and **CFS Premium**.

Your SonicWALL Security Service free trials are now activated. You must now enable each service on your SonicWALL security appliance. Use the following instructions to configure each service with its default values. For complete configuration instructions, see the administrative guides available on your SonicWALL resource CD and on the Web at: http://www.sonicwall.com/support/documentation.html.

Enabling Premium Content Filtering Service

1. Select the **Security Services > Content Filter** page in the SonicWALL management interface.
2. Select the **LAN** checkbox to apply the filter to all computers on your LAN interface.

3. Click **Configure**, choose the categories to block in the **URL List** tab, and click **OK**.
4. Click **Apply** in the top, right corner of the page.

Enabling Network Anti-Virus Service

1. Select the **Security Services > Network Anti-Virus** page in the SonicWALL management interface.
2. Select the **Enable Anti-Virus** checkbox.
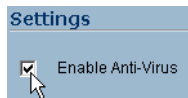
3. Click **Apply** in the top, right corner of the page.

Users on your network will be prompted to download the SonicWALL Anti-Virus client.

Enabling Intrusion Prevention Service

1. Select the **Security Services > Intrusion Prevention** page in the SonicWALL management interface.
2. In the **IPS Global Settings** section, click the **Enable IPS on Interface** checkbox, and check the **WAN** and **LAN** interface check boxes.

3. In the **Signature Groups** table, select **Prevent All** for **High Priority** attacks.
4. Click **Apply** in the top, right corner of the page.

## Enabling Gateway Anti-Virus Service

1. Select the **Security Services > Gateway Anti-Virus** page in the SonicWALL management interface.
2. In the **Gateway Anti-Virus Global Settings** section, click the **Enable Gateway Anti-Virus on Interface** checkbox, and check the **WAN** and **LAN** interface boxes.

   Gateway Anti-Virus Global Settings

   ☑ Enable Gateway Anti-Virus

3. Click **Apply** in the top, right corner of the page.

Enabling Anti-Spyware Service

1. Select the **Security Services > Anti-Spyware** page in the SonicWALL management interface.

   Anti-Spyware Global Settings

   ☑ Enable Anti-Spyware
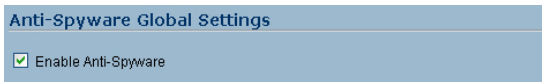
2. In the Gateway **Anti-Spyware Global Settings** section, click the **Enable Anti-Spyware** checkbox.
3. Select which interfaces you want to apply Anti-Spyware service on, **WAN**, **LAN**, and **OPT**.
4. Select the **Prevent All** checkbox for **High**, **Medium**, and **Low** danger levels. This will block all spyware that can be detected.
5. Click **Apply** in the top, right corner of the page.

Connecting Computers to Your SonicWALL PRO 2040

You can attach an unlimited number of computers to your SonicWALL PRO 2040.
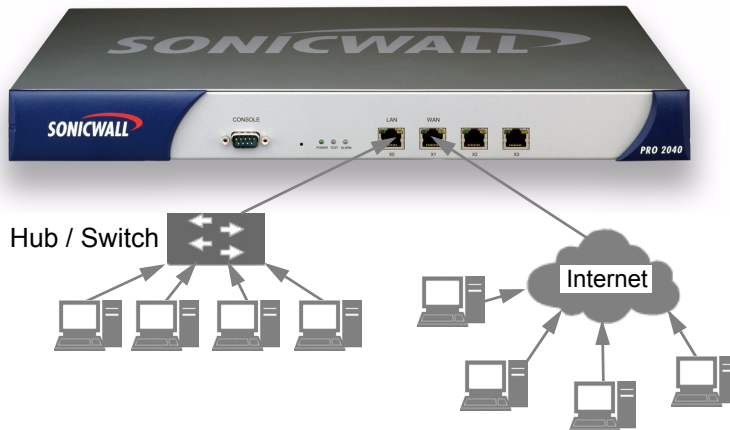
Connect a computer, hub or switch in your LAN to the LAN / X0 port.

If you are using a DHCP server on your LAN, you need to configure the computers to accept dynamic network settings.

If you are not using DHCP on your LAN, you need to configure the computers with a static IP address in the same subnet as the LAN IP address on your SonicWALL PRO 2040.

For instructions on configuring the network settings for most Windows computers, see "Configuring Computers for Your LAN" on page 20

You can set up your **X2** port to create another subnet or a transparent gateway to the Internet for network hosts such as Mail and Web servers. For instructions on configuring the **X2** port, refer to the SonicOS Standard Administrator's Guide available on the SonicWALL Resource CD and on the SonicWALL's Documentation Web Site at: http://www.sonicwall.com/support/documentation.html.

Configuring Computers for Your LAN

DHCP

If you enabled the DHCP Server in the Setup Wizard, each computer on your network must be configured to obtain its IP address dynamically. The following steps provide instruction on changing the Local Area Connection settings for several versions of Windows.

Windows XP

1. Open the **Local Area Connection Properties** window (**Start > Settings > Network Connections** on most versions of Windows XP).
2. Right click on the **Local Area Connection** icon, and choose **Properties**.
3. In the list of connection items, select **Internet Protocol (TCP/IP)** and click **Properties**.
4. Select **Obtain an IP address automatically**.
5. Select **Obtain DNS Server automatically**.
6. Click **OK** and then **OK** again to apply the settings.

Windows 2000

1. From your Windows **Start** menu, select **Settings**.
2. Open **Network and Dial-up Connections**.
3. Right click on the **Local Area Connection** icon, and choose **Properties**.
4. Highlight **Internet Protocol (TCP/IP)** and click **Properties**.
5. Select **Obtain an IP address automatically**.
6. Select **Obtain DNS Server automatically**.
7. Click **OK** and then **OK** again to apply the settings.

Windows NT

1. From the **Start** list, highlight **Settings** and then select **Control Panel**.
2. Open **Network**.
3. Double-click **TCP/IP** in the **TCP/IP Properties** window.
4. Select **Obtain an IP address automatically**.
5. Click **DNS** at the top of the window.
6. Select **Obtain DNS Server automatically**.
7. Click **OK**, and then click **OK** again.
8. Restart the computer to apply the settings.

Windows 98

1. In the **Start** menu, select **Settings** and then select **Control Panel**.
2. Open **Network**.
3. Double-click **TCP/IP** in the **TCP/IP Properties** window.
4. Select **Obtain IP Address automatically**.
5. Click **DNS Configuration**.
6. Select **Obtain DNS Server automatically**.
7. Click **OK**, and then click **OK** again.
8. Restart the computer to apply the settings.

Static IP

If you did not enable the SonicWALL security appliance DHCP server, you must configure each computer with a static IP address from your LAN or WLAN IP address range. After the SonicWALL PRO 2040 has restarted, follow the steps below for configuring your network clients running any of the following Microsoft Windows operating systems on your LAN/WLAN:

Windows XP

1. Open the **Local Area Connection Properties** window.
2. Double-click **Internet Protocol (TCP/IP)** to open the **Internet Protocol (TCP/IP) Properties** window.
3. Select **Use the following IP address** and type an IP address from your LAN IP range in the **IP address** field.
4. Type **255.255.255.0** in the **Subnet Mask** field.
5. Type the SonicWALL PRO 2040 LAN IP Address into the **Default Gateway** field.
6. Type the DNS IP address in the **Preferred DNS Server** field. If you have more than one address, type the second one in the **Alternate DNS server** field.
7. Click **OK** for the settings to take effect.

Windows 2000

1. From your Windows **Start** menu, select **Settings**.
2. Open **Network and Dial-up Connections**.
3. Click **Properties**.
4. Highlight **Internet Protocol (TCP/IP)** and click **Properties**.
5. Select **Use the following IP address**.
6. Type an IP address from your LAN IP range **IP address** field.
7. Type **255.255.255.0** in the **Subnet** field.
8. Type the SonicWALL PRO 2040 LAN IP Address into the **Default Gateway** field.
9. If you have a DNS Server IP address from your ISP, enter it in the **Preferred DNS Server** field.
10. Click **OK** for the settings to take effect.

Windows NT

1. From the **Start** menu, highlight **Settings** and then select **Control Panel**.
2. Open **Network**.
3. Double-click **TCP/IP** in the **TCP/IP Properties** window.
4. Select **Specify an IP Address**.
5. Type an IP address from your LAN IP range in the **IP Address** field.
6. Type **255.255.255.0** in the **Subnet Mask** field.
7. Type the SonicWALL PRO 2040 LAN IP Address in the **Default Gateway** field.
8. Click **DNS** at the top of the window.
9. Type the DNS IP address in the **Preferred DNS Server** field. If you have more than one address, enter the second one in the **Alternate DNS server** field.
10. Click **OK**, and then click **OK** again.
11. Restart the computer for changes to take effect.

Windows 98

1. In the **Start** menu, select **Settings** and then select **Control Panel**.
2. Open **Network**.
3. Double-click **TCP/IP** in the **TCP/IP Properties** window.
4. Select **Specify an IP Address**.
5. Type an IP address from your LAN IP range in the **IP Address** field.
6. Type **255.255.255.0** in the **Subnet Mask** field.
7. Type the SonicWALL PRO 2040 LAN IP Address in the **Default Gateway** field.
8. Click **DNS Configuration**.
9. Type the DNS IP address in the **Preferred DNS Server** field. If you have more than one address, type the second one in the **Alternate DNS server** field.
10. Click **OK**, and then click **OK** again.
11. Restart the computer for changes to take effect.

Glossary of Networking Terms

Default Gateway - A device on an internetwork that forwards packets to another network.

DHCP - Dynamic Host Configuration Protocol allocates IP addresses to computers on the network automatically without assigning a computer a static (fixed) IP address.

DNS - Domain Name System, a hierarchical naming system that resolves a domain name with its associated IP address. A DNS server looks up the name of a computer and finds the corresponding IP address. This allows users to access hosts using friendly text-based names instead of IP addresses. These names are called fully qualified domain names (FQDN).

IP Address - Internet Protocol Address, a thirty-two bit number that identifies a computer or other resource on the Internet or on any TCP/IP network. The number is usually expressed as four numbers from 0 to 255 separated by periods, for example, 172.16.31.254.

LAN - A Local Area Network is typically a group of computers located at a single location, and is commonly based on the Ethernet architecture.

NAT - Network Address Translation, An internet standard that allows your local network to use private IP addresses, which are not recognized on the Internet. The IP address used for the router is the only routable IP address. The computers behind the NAT can access the Internet through the router, but Internet users cannot access the computers behind the router.

Packet - A unit of information transmitted over the internet or within any TCP/IP network. Packets have a header, which contains information about the source, destination, and protocol to be used for the data, and a body, which contains the data being transmitted.

PPPoE - The Point to Point Protocol over Ethernet supports the transmission of network packets over an analog phone line.

Private IP Address - An IP address for a resource in your network that is not known or published outside the zone (for example LAN) where it is located.

Public IP Address - An IP address for a resource in your network that is published outside your network to the WAN.

Router - A device that routes data between networks through IP address information in the header of the IP packet. A router forwards packets to other routers until the packets reach their destination. The Internet is the largest example of a routed network.

Subnet - A portion of a network. Each subnet within a network shares a common network address and is uniquely identified by a subnetwork number.

Subnet Mask - A 32-bit number used to separate the network and host sections of an IP address. A subnet mask subdivides an IP network into smaller pieces. An example of a subnet mask might be 255.255.255.248 for subnet with only eight IP addresses.

TCP/IP - Transmission Control Protocol/Internet Protocol is the basic communication protocol of the Internet. It supports sending information in packets, and identifies each device with a unique numeric IP address.

VPN - A Virtual Private Network is a virtual network that encrypts data and sends it privately over the Internet to protect sensitive information.

WAN - A Wide Area Network is a geographically distributed network composed of multiple networks joined into a single large network. The Internet is a global WAN.

SonicWALL PRO 2040 Security Appliance Regulatory Statement and Safety Instructions

Regulatory Model/Type	Product Name
1RK0A-02A	PRO 2040

Detailed regulatory information can be found in the electronic file, "**SonicWALL_PRO 2040_Regulatory_Statement.pdf**," located on the SonicWALL Resource CD provided with the unit or on the SonicWALL Web site: <http://www.sonicwall.com>.

Lithium Battery Warning

The Lithium Battery used in the SonicWALL Internet security appliance may not be replaced by the user. The SonicWALL must be returned to a SonicWALL authorized service center for replacement with the same or equivalent type recommended by the manufacturer. If, for any reason, the battery or SonicWALL Internet security appliance must be disposed of, do so following the battery manufacturer's instructions.

Cable Connections

All Ethernet and RS232 (Console) cables are designed for intra-building connection to other equipment. Do not connect these ports directly to communication wiring or other wiring that exits the building where the SonicWALL is located.

Mounting the SonicWALL PRO 2040

The above SonicWALL appliances are designed to be mounted in a standard 19-inch rack mount cabinet. The following conditions are required for proper installation:

- Use the mounting hardware recommended by the rack manufacturer and ensure that the rack is adequate for the application. SonicWALL includes a rack mounting kit with the SonicWALL PRO 2040 that is compatible with most computer equipment racks.
- Four mounting screws, compatible with the rack design, must be used and hand tightened to ensure secure installation. Choose a mounting location where all four mounting holes line up with those of the mounting bars of the 19-inch rack mount cabinet.
- Mount in a location away from direct sunlight and sources of heat. A maximum ambient temperature of 104º F (40º C) is recommended.
- Route cables away from power lines, fluorescent lighting fixtures, and sources of noise such as radios, transmitters, and broadband amplifiers
- Ensure that no water or excessive moisture can enter the unit.
- Allow unrestricted airflow around the unit and through the vents on the side of the unit. A minimum of 1 inch (25.44mm) clearance is recommended.
- Mount the SonicWALL appliances evenly in the rack in order to prevent a hazardous condition caused by uneven mechanical loading.
- Consideration must be given to the connection of the equipment to the supply circuit and the effect of overloading the circuits has minimal impact on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings must be used when addressing this concern.
- Reliable grounding of rack-mounted equipment must be maintained. Particular attention must be given to power supply connections other than direct connections to the branch circuits such as using power strips.

Copyright Notice

Trademarks

Notes

Notes

SONICWALL